PAT-NO: JP02007291575A **DOCUMENT-IDENTIFIER:** JP 2007291575 A

TITLE: ACRYLIC SHRINKABLE FIBER AND

PILE CLOTH BY USING THE SAME

PUBN-DATE: November 8, 2007

INVENTOR-INFORMATION:

NAME COUNTRY

NISHIDA, SOHEI N/A MIYOSHI, MASAAKI N/A

ASSIGNEE-INFORMATION:

NAME COUNTRY

KANEKA CORP N/A

APPL-NO: JP2006123353 **APPL-DATE:** April 27, 2006

INT-CL-ISSUED:

TYPE IPC DATE IPC-OLD

IPCP D01F6/38 20060101 D01F006/38 IPFC D01F6/40 20060101 D01F006/40 IPFC D01F6/54 20060101 D01F006/54

ABSTRACT:

PROBLEM TO BE SOLVED: To provide an acrylic shrinkable fiber having a flat cross sectional shape and also having a high shrinking function even by stretch-treating under a condition of giving a high stretching magnitude and also giving a dyeing treatment, and a pile cloth obtained by using the fiber as the fiber constituting a short pile part.

SOLUTION: This acrylic shrinkable fiber is a synthetic fiber containing an acrylic copolymer (A) and characterized by capable of being dyed at ≤80°C temperature, and having a function of shrinking by 10 to 40% range shrinking rate under the dry heat of 130°C even after the dyeing and 3 to 20 flatness RA expressed by the following formula (1) of the fiber cross sectional surface. Preferably the polymer constituting the fiber is obtained by mixing (A) 30 to 99 wt.% acrylic copolymer with (B) 1 to 70 wt.% copolymer consisting of an acrylic acid ester and other copolymerizable vinyl monomers, and the pile cloth by using the same is also provided. Formula (1): the flatness: RA=WL/WS [wherein, WL is the length of its long axis; WS is the length of its short axis, and also RA is an average value of the flatness from 10 pieces of fibers extracted randomlv1.

COPYRIGHT: (C) 2008, JPO&INPIT